

Title (en)
COMPOSITIONS AND METHODS OF TARGETED NUCLEIC ACID ENRICHMENT BY LOOP ADAPTER PROTECTION AND EXONUCLEASE DIGESTION

Title (de)
ZUSAMMENSETZUNGEN UND VERFAHREN ZUR GEZIELTEN NUKLEINSÄUREANREICHERUNG DURCH SCHLEIFEN-ADAPTERSCHUTZ UND EXONUKLEASE-VERDAU

Title (fr)
COMPOSITIONS ET PROCÉDÉS D'ENRICHISSEMENT D'ACIDE NUCLÉIQUE CIBLE PAR PROTECTION D'ADAPTATEUR DE BOUCLE ET DIGESTION PAR EXONUCLÉASE

Publication
EP 3935184 B1 20240911 (EN)

Application
EP 20711334 A 20200304

Priority
• US 201962813667 P 20190304
• US 201962898892 P 20190911
• IB 2020051846 W 20200304

Abstract (en)
[origin: WO2020178759A1] Compositions and methods for enriching DNA from any loci of interest are provided. Endonuclease(s) such as RNA-guided nucleases Cpf1/Cas9 can cut the flanking regions of the gene of interest in, for example genomic DNA, followed by ligation of loop adapters. The loop adapters protect the gene of interest for subsequent digestion with one or more exonucleases. Multiple genes of interest can be digested and ligated with loop adapters at the same time. The undigested target sequence can be further purified by, for example, gel extraction using, for example, a commercial DNA purification kit. The enriched DNA can be used for sequencing.

IPC 8 full level
C12Q 1/6806 (2018.01)

CPC (source: EP US)
C12Q 1/6806 (2013.01 - EP US)

C-Set (source: EP)
C12Q 1/6806 + C12Q 2521/319 + C12Q 2521/501 + C12Q 2525/205 + C12Q 2525/301 + C12Q 2535/122 + C12Q 2537/159

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2020178759 A1 20200910; EP 3935184 A1 20220112; EP 3935184 B1 20240911; US 2022127661 A1 20220428

DOCDB simple family (application)
IB 2020051846 W 20200304; EP 20711334 A 20200304; US 202017436398 A 20200304